

THE MEDICAL JOURNAL OF AUSTRALIA

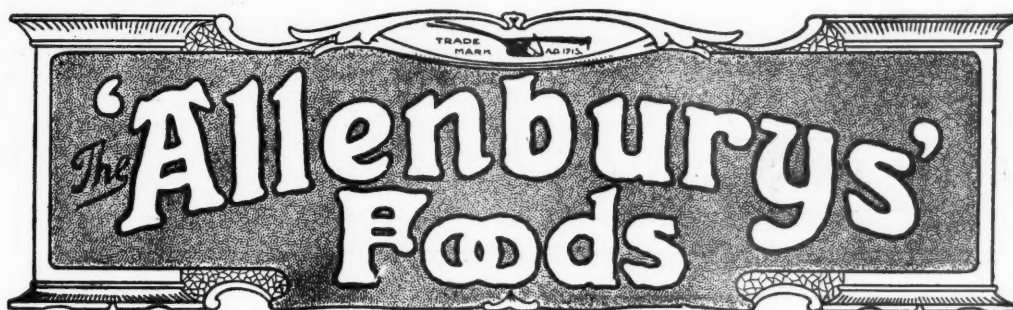
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VOL. I. 3RD YEAR—No. 16.

SYDNEY: SATURDAY, APRIL 15, 1916.

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Refer to Note issued by Dr. Robert Hutchison to face Page 470 of his book, "Food and the Principles of Dietetics," Third Edition, Revised and Enlarged, Second Impression, 1913.

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VOL. I.—3RD YEAR.

SYDNEY: APRIL 15, 1916.

No. 16.

REMARKS ON SOME NEUROSES AND PSYCHOSES IN WAR.

By A. W. Campbell, M.D.,

Major, A.M.C., A.I.F. (retired), Sydney.

During a year of service with No. 2 Australian General Hospital, comprising the time that operations were proceeding at the Dardanelles, it was vividly demonstrated to my fellow-officers and myself that neuroses and psychoses contributed to modern war casualty lists more heavily than we had previously supposed. There were times when the wards allotted to my charge were almost monopolized by such cases. Probably hospitals stationed at Cairo, as ours was, received an extra influx of these men, because in the process of filtration from firing-line to base they would pass through before the fevered sick and seriously wounded. Be this as it may, it was manifest that these conditions among Australian troops were frequent; and their importance, both from medical and military points of view, may justify these lines, written as an addendum to observations made in other fields.

Classification.

To find a continent classification is not easy, because there is so much overlapping, but for descriptive convenience the conditions may be divided into:—

- (1) Neuroses involving the motor apparatus and common sensibility.
- (2) Neuroses involving the special senses and the faculty of speech.
- (3) Neurasthenia and other conditions, including "trench spine."
- (4) Psychoses.
 - (a) Minor.
 - (b) Mental Stupor.
 - (c) Insanity.

(1) *Neuroses Involving the Motor Apparatus and Common Sensibility.*

This heading embraces cases of hemiplegia and other paralyzes and pareses, and contractures and spasms, with or without disturbance of common sensibility.

The conditions were often reminiscent of what the civil practitioner knows so well as resulting from railway and tramway accidents, and would present as much difficulty in diagnosis and treatment; some few cases would have passed as candidates for the "litigious neurosis."

Just as the disabilities assumed diverse forms, too numerous to specify, so they affected younger and older men indiscriminately, and so likewise the cause varied. For example, a sergeant wearing the South African ribbon stated that he was buried with earth from a percussion shell explosion, and that, on regaining consciousness after 48 hours, he had

excruciating pains in the loins and a dead and powerless right leg, which had persisted. Though from the beginning we suspected a neurosis, we did not feel sure of our position until one of our surgeons and our radiographer had contributed their opinions. Another, an artist by profession, and highly strung, was grazed on the arm by a falling shell-case, lost his balance, and went over a rocky slope. Stretcher-bearers found him complaining of great pain and inability to move limbs or trunk. He came to us with exquisite spinal rigidity, unable even to turn in bed, and with his arm in splints, and though of fracture there was none (X-ray) it took some days to convince ourselves and some weeks to convince him that his trouble had no organic basis. Again, in two instructive cases of hemiplegia with hemianesthesia the responsible cause was a shell-burst close at hand; one man lost consciousness, the other did not. And again, in others, we would find a neuropathic spasm, contracture or paralysis grafted upon a wound.

On carefully examining such cases, we seldom failed to find positive indications that the affection was a neurosis. Thus, in a paralysis of the leg the loss of movement would be exaggerated, in some way different from an organic paralysis, and would have its nature revealed by one of the various tests to distinguish organic from functional lesions. Tapping the patellar tendon might evoke a movement violent as it was unreal, and a second tap on the head of the tibia, normally resultless, might bring forth a movement even more violent; moreover, neither quadriceps nor ankle clonus, nor the extensor plantar reflex of Babinski would be present.

Similarly, the contractures and spasms were often peculiar, first, in selecting unusual muscles or groups of muscles, for instance, the *trapezius*, the *quadriceps femoris*, or the *erector spinae*; and, secondly, in being unattended by the concomitant phenomena to be looked for in cases having an organic basis, such as alteration of the reflexes, tender nerve points, definable sensory change, etc., pointing, it might be, to a focal source of irritation in the spinal cord or nerves, or to an inhibitory defect in higher centres.

Likewise, the anesthesia was anomalous, its distribution would not fit in with a lesion of brain, cord or peripheral nerves. Moreover, anesthesia to light touch and pin-prick might be complete over a certain area, but would not be associated with loss of deep sensibility. And, again, different kinds of anesthesia might be suggested by the examiner.

Turning to those having wounds, apart from cases of temporary wrist- and foot-drop, without territorial sensory loss, proving nerve lesion, of which every medical officer saw examples, there were puzzling cases of paralysis or paresis of muscles or limbs, in which there would be no evidence of nerve injury, no interference with galvanic or faradic excitability, and no vasomotor or

trophic change, and in which X-ray examination might show no sign of bone injury. In attempting to explain these we thought of several psychic possibilities: (1) That an emotional subject, with a limb long-fixed in an abnormal attitude by apparatus or by contraction of antagonistic muscles, would be unduly apprehensive of the pain which movement might induce, just as in the child suffering from infantile paralysis memory of the agonising pain felt in earlier stages will long prevent movement of the affected limb and obscure the real degree of paralysis; or (2) that from long disuse, loss of mental representation of the movements and of the muscle sense and the sense of posture had occurred; or (3) that the patient had a fixed idea of the incurability of his injury; or (4) that contractions which might be present were hysterical. And, regarding hysteria, I may here mention a case of hysterical hemiplegia occurring homolaterally to a trivial wound of the head, and one of hysterical monoplegia and anaesthesia of the arm, referable to a severe injury sustained nine years previously, an injury which had left scarring of the forearm and stiffness of the index finger.

From the foregoing, it is evident that there is no end to the variety of these so-called functional affections of the motor apparatus and common sensibility, and that to secure effective treatment one must be constantly on guard to detect the real nature of the condition. I need only add that in virtually all the cases we saw there were concurrent indications of nervous instability and psychic shock, such as tachycardia, epigastric pulsation, tremor, sighing, hyperidrosis, polyuria, insomnia, night terrors, hyperemotivity and anxiety.

(2) *Neuroses Affecting the Special Senses and Speech.*

Of this group of disorders, we saw numerous examples. Almost without exception the subjects were young and obviously neurotic; many had a tainted family history, and in most the cause was a severe shock, such as a shell explosion close at hand, lifting them in the air and burying them with debris, and perhaps, but not necessarily, rendering them unconscious.

Cases of speech affection, aphonia, anarthria, or mutism, or stammering, were most frequent. After the early August fighting at Anzac we received five from one convoy.

The mutism might be absolute, the attempt to speak completely futile, or indicated only by a feeble movement of the lips and a faint expiratory puffing murmur, or by the repetition of a sound like "gar, gar, gar." One bugler boy, with a gesture of annoyance, said in writing, "I can speak if the listener will be patient." On exercising the called-for patience the listener heard a faint and slow but intelligible whisper. In others, speech, though possible, was laboured, scanning and low pitched, and others exhibited a decided stammer.

It was our practice in the case of patients admitted with neuroses to request them to write their own histories. These were often interesting, and from the cases under discussion we gathered that they complained of nothing but the disorder of

speech. On analysing the more severe and typical cases we found that they would not bear comparison with cases of organic aphasia, in particular because they showed integrity of the higher factors concerned in speech. Thus, on the positive side, they were perceptually and intellectually perfect, their thought processes seemed to be normal, they could enjoy reading, and they could propositionize in writing clearly and fluently (hence they were not wordless); also emotionally they would react to remarks made to evoke surprise, joy, disappointment, etc. Whereas, on the negative side, they merely exhibited loss of articulatory power, associated sometimes with loss of power to protrude the tongue and shape the lips, and sometimes with loss of volitional control of the respiratory mechanism. Essentially, therefore, they differed from cases of classical aphasia, and, for this reason, as a designation, the term mutism is preferable. And, since all the higher factors concerned in speech were intact, it would appear, as surmised by Mott, that we had to deal simply with a temporary inhibition of volitional control of centres governing and regulating the respiratory and muscular apparatus of the speech mechanism.

Though the duration of the disability varied, perfect recovery as regards the proximal affection was the rule. Hence, from the beginning, encouraging and hopeful suggestions could be thrown out. Commonly, after allowing them a day or two in which to settle down, we would suggest that at our next visit they would be able to whisper, the suggestion usually took effect, and ordinary speech soon followed. One mute man was heard talking in his sleep, and so gave us a useful psycho-therapeutic lever. The kink in the mechanism was occasionally undone by a sudden and unexpected surprise. A "whisperer" who had resisted suggestion for a fortnight, and who stated that he used to "take fits" when a boy, loosened his tongue with an outburst of profanity after a fall downstairs. In this connexion, one is reminded of Dr. Hughlings Jackson's story of the jibbing 'bus horse, which stubbornly refused to respond to the blandishments of the driver, but moved on when the conductor slammed the backdoor of the vehicle, the customary starting signal and stimulus. This animal could not exercise its will to move, so likewise these mute men could not exercise their will to speak.

Blindness.—Cases of blindness, due to psychic shock, inaptly called "shell blindness" were in our experience infrequent. One boy was struck blind within a few minutes of the landing at Anzac on April 25, 1915. He was invalided to a hospital in Egypt, made a rapid recovery, and was inadvisedly returned to the front, where the first exploding shell brought a recurrence of his affection.

As in the mute cases, so in these; beyond the mere loss of vision and the emotional disturbance following shock, there was no ailment or noteworthy change. The patients would lie in bed with staring eyes and dilated pupils, declaring that they could not distinguish light from darkness. Examination would show neither abnormality of the external

parts of the eye nor of the fundus; the pupils would react to light, and there would be no nystagmus nor oculo-motor paresis.

In treatment, suggestion was again a valuable aid. They could be coaxed to recovery day by day, first to distinguish light from darkness, and sequentially to recognize form, colours and letters.

Deafness.—Instances of psychic deafness were still less common; but we have notes of several cases in which the defect was unilateral, and complete alike to air and bone conduction, and in which there was no positive evidence of trauma, in the shape of hæmorrhage from the ear or rupture of the tympanum, and no sign of labyrinthine disturbance.

In one remarkable case there existed the triad of left-sided deafness, left-sided hemianopia, and aphonia. The subject was a hysterical youth, who soon shed his disabilities.

In summary form it may be said with truth that all these neuroses involving the faculty of speech and special senses carried a suggestion of exaggerated hysteria. Also, the immediate causal factor in all was alike; emotional shock contributed to in varying measure by physical fatigue and mental strain. Some, perhaps, were paralysed by fear, but not all; the courage of some was unequivocal; one mute boy had fought well for three successive days and taken part in a heroic rescue of one of his officers before being stunned by a mine explosion, as was corroborated by one of his company sergeants, who happened to be lying in the next bed.

Finally, to speculate concerning the localization of the disturbance is, in my opinion, fruitless. Having regard to the complex nature of the speech function, the statement made by some that in cases of mutism the frontal lobe must be functionally damaged is absurd. Also, in cases of blindness and deafness, it is impossible to show on what part of the apparatus the abrogation of function specifically falls, whether on the periphery, or on centres where the impressions impinge, or on higher centres, where the impressions are interpreted.

(3) *Neurasthenia and Other Neuroses.*

Among other neuroses brought out by the strain of firing-line conditions we observed various degrees of what is denominated neurasthenia, but this was not so frequent as we anticipated. Prolongation of the strain, however, may add to the number.

As a rarer condition, we saw an excellent case of hemichorea, with movements of face, trunk and limbs on one side so violent that the subject was unable to walk, use a bed-pan or take food unassisted; his speech also was jerky. This was the outcome of trench fighting, but he had had a similar attack four years previously, and, what is more important, his mother and sister had suffered in a similar way, so that it may be regarded as of the nature of a mimetic affection or tic.

Another remarkable case was one of acute and most severe exophthalmic goitre developing almost immediately after a period of unconsciousness due to a shell explosion. This man was 35 years of age, and presented a pulsatile enlarged thyroid, manifest

exophthalmos, von Graefe's sign (slightly), some general muscular rigidity, very active tendon reflexes, coarse tremor of the hands, incoördination of the arms, tremor of the tongue, ataxic speech and profound cardiac arrhythmia, causing critical fainting attacks.

"Trench Spine," Spinal Concussion or Shock.—"Trench spine" is supposed to be akin to railway spine, but usually the subjects are not inherently neurotic, nor are the clinical phenomena suggestive of simple "functional" disorder, hence it is very doubtful whether the condition should be included among the neuroses. I write of it only because in the minds of some further observations are needed.

We saw twelve cases; therefore, the condition is not infrequent.

In regard to the cause, the histories varied. Some were knocked down by the "windage" of a shell exploding behind them, one "was buried up to the neck in a trench by the explosion of an 8-inch shell," another sitting in a "dug-out" was covered with earth by a percussion shell, one was "blown up by a mine," and so on. Since consciousness was invariably obliterated by the explosion, none of these patients could give one an exact idea as to the part a crush or fall or other factor over and above the "windage" played in the production of the disability. It is probable, however, that the sudden atmospheric rarefaction was the essential cause.

According to their statements, on regaining consciousness they had general pain, more intense across the small of the back than elsewhere, and they were unable to move one of their legs or more often both; the majority had retention of urine, lasting up to 48 hours, some had hæmaturia, and some vomited blood more than once.

On admission to No. 2 General Hospital, some five days later, the condition would be considerably ameliorated. The paralysis would be less; the patients might even be attempting to walk. There would be no spasticity, and the knee-jerks would be absent or exaggerated (probably in the early stages they would be absent). They would still suffer from lumbar pain, and the lower lumbar vertebræ would be tender on percussion, and movement in bed or an attempt to walk would aggravate the trouble.

Frequently we found an interesting disturbance of sensibility, which, so far as we are aware, has not been mentioned by other observers. In the lumbosacral region, over a sharply-defined area, varying in extent, but approximately corresponding with the distribution of two or more sacral roots, usually the third and fourth, there was anæsthesia to light touch and pain, or hyperæsthesia to pain, with preservation of the tactile sense, or slight tactile loss.

It is singular that in all these cases the concussion effects were confined to the lower end of the cord; we saw none involving the cervical region, although we believe this does occur. Also, it is remarkable that in none were there signs of permanent abrogation of function. While recovery was delayed, and for several weeks after rising from their beds they

would walk with bent spine, they ultimately left hospital with promise of recovery.

On the pathology of the condition a chapter has to be written. For the present, we can only speculate, thinking of an initial displacement of cerebro-spinal fluid or substance operating with transitory effect on the whole nervous system, and of a residual disturbance of the lower spinal segments, consisting of air formation in capillaries, emboli, minute softening and hæmorrhages, and œdema in the substance of the cord, resembling what has been found in caisson disease. The paralysis of movement, sensibility and bladder point to some such change, superimposed upon local bruising.

(4) *Psychoses.*

(a) *Minor Conditions.*—Men unable to withstand fire, "gun shy" men, constituted a considerable group, which may be briefly considered. These were not necessarily wanting in courage, many of them, possibly self-goaded, continued on duty for weeks before parading sick. Some were finally knocked out, but not wounded by an explosion of some kind. Some had an overwhelming dread of aeroplane bombs only; some, having previously received a slight wound of the head, had been invalidated back and not given way until their return to the firing-line.

Such cases would be admitted with various benign diagnoses, "mental or nervous shock or strain," "shell-shock," "stupor," "loss of memory," etc., and on admission the patients might appear to be in normal health. Further observation, however, always showed signs of psychic disturbance, such as a restless, nervous demeanour, easy excitation, insomnia and disturbing dreams. Those acquainted with and willing to give their family history might reveal a psychopathic tendency. Others might refer their failing to some incident of boyhood. Thus one had been morbidly "impressed by a street fight, and thereafter could not bear the sight of blood"; another had been terrified by tales of a hairy man. Again, cases were provided by professional men and skilled artisans with abnormally active and inventive brains, whose fibres were ever at high tension. Others again had the seeds of their collapse sown during the period of training, with its attendant anxiety and excitement.

All these men could give a harrowing account of their mental suffering and of the paralysing effect of battle incidents. Their statements and some written descriptions were not only impressive but instructive in showing that the fundamental process was one of psychic shock, exhibited by a temporary paralysis of action, or a confusional fugue, or transitory obsessions and fears that something dreadful was about to happen, not necessarily to themselves, possibly to their comrades. In this state an officer would be as incapable of giving orders as a man would be of obeying them, either would be impelled to lie *perdu* in his "dug-out" or any cover, trembling and in a cold sweat, suffering an agonising paroxysm of what Janet would call "psycholepsy."

To these might be added the group of men given to psychasthenia, hypochondriasis and introspection, who had experienced some previous illness, or opera-

tion, or slight wound or fracture, or who had slight varicocele or varicose veins, or some similar affection, upon which their minds were anchored and which a normal subject would disregard. Such cases swelled the admission lists, and were a source of trouble to medical boards. Commonly, they were credited with malingering, perhaps unjustly, because the inherent psychopathic basis was the true cause. Be this as it may from the service point of view, they were a useless load.

(b) *Mental Stupor.*—We also saw a few examples of transient mental stupor, anergia or acute dementia. In the more severely affected there might be complete unconsciousness, general muscular rigidity and impairment of pupillary light reflexes, while the milder cases might merely exhibit degrees of dulness, hesitancy and apathy, indifference to surroundings, sluggishness of movement, and a dazed appearance and demeanour, suggesting recovery from some terrifying experience. A young New Zealander, whose two brothers had been killed beside him, showed a portion of his hair turned grey by the shock.

All these cases occurred in young men who would be called nervously unstable. Sudden onset of shock symptoms and temporary loss of memory for subsequent events were the rule. Unconsciousness, if present, was usually regained suddenly, and its duration could be measured in days. Similarly, in all cases the restful environment, attentive nursing and abundant diet of hospital life soon brought relief of symptoms.

(c) *Insanity.*—Finally we come to cases of actual insanity, that is, cases which in civil practice one would not hesitate to certify for treatment under restraint, and which, by request of the House of Commons, were humanely indicated by the non-committal designation "nerve strain."

From the small number of admissions to No. 2 Australian General Hospital, we received the impression, contrary to expectation, that attacks of definite insanity were little, if at all, more frequent among our troops than they would be in a similar body of men under peace conditions. At no time did we have more than half a dozen cases under treatment. Nor was the Gallipoli landing or subsequent occupation followed by a special influx. Of course, some went to other general hospitals, and a certain number to the State Mental Hospital at Cairo, but, from enquiries made, we gathered that we received a full share.

In these cases, as might be expected, the delirium, the delusions and the hallucinations had a war colouring; illustrated by the officer who, in spite of a good fighting record, was acutely melancholic under the delusion that he was regarded as a coward, and who imagined that he heard men in the next room talking to this effect; and by the man so mentally confused as to mistake a "medical board" for a court martial, and at every visit ask when he was to be shot; and the maniac who psychically substituted pillows and barred windows for hand grenades and Turks.

But, taken as a whole, the types of insanity did not differ from those seen in civil practice, and

forced one to conclude that active service produced no special nosological disorder of mind.

General Considerations.

Actiology.

It has been incidentally mentioned, in describing the neuroses, that they commonly followed on periods of unconsciousness or on emotional shock, and phases of intervening meditation, and the effects of physical fatigue and mental strain have been alluded to, but, as a causal factor standing over and above all these, we wish to emphasize the importance of predisposition. Time after time, on going into the family and personal histories of such cases, we found evidence of neuropathic or psychopathic infirmity, and this was the fundamental cause of their downfall.

Prognosis and Treatment.

Concerning the neuroses, recovery from the proximal and immediate disability could be expected, and many subjects later might prove useful and efficient on lines of communication, or at a base dépôt; but, as regards further fighting, all, with one stroke of the pen, might be crossed out as "permanently unfit," and, in doing this, a pang of regret would be felt that their primal weakness was such as to defy detection prior to enlistment.

Treatment, as in all ideo-obsessive states, called for care and judgement. To gain the confidence of the patient and place him under tactful nurses were essential preliminaries, prior to attack with all the psycho-therapeutic measures under command.

For affections of the motor apparatus, massage proved very useful.

Without being malingerers, these men generally exaggerated their disability, and, as carriers of psychic contagion were a source of danger in a ward, therefore we always endeavoured as far as possible to isolate them. From each other they received no sympathy. Further, it should be pre-recognized that to save resistive cases from acquiring the invalid habit, the shorter their stay in hospital and the sooner they resume civilian garb the better. Also, it cannot be too plainly indicated regarding men who have to be returned to Australia that stringent measures should be formulated and forewarnings given for dealing with them on the transport, and on disembarkation and prior to discharge. This is a continuous critical period, during which they must be guarded with the utmost tact and circumspection against themselves and their friends and a grateful country.

The treatment of mental disorders in general hospitals like those in Egypt is liable to be unsatisfactory, because, to obtain isolated and suitable rooms and exercising grounds is difficult, also, skilled orderlies or a sufficiency are not always on hand. Later, when amelioration in a case prompts removal, one thinks of a recurrence and a disaster on the transport. These difficulties, however, are not insurmountable. Either a small special hospital could be established, and from its staff details drawn for transport duties, or a medical officer and a sufficiency of orderlies or nurses, skilled in the manage-

ment of mental cases, and, at the same time, able to perform ordinary duties if needed, could be attached to each general hospital.

A NOTE ON THE BACTERIOLOGICAL EXAMINATION OF URINES.

By Lionel B. Bull, B.V.Sc.,

South Australian Government Laboratory of Pathology and Bacteriology.

On account of the occurrence of infections from the bacilli of the typhoid-paratyphoid group among troops on active service, bacteriologists in all parts of the world have had to devote themselves more than usual to the examination of stools and urine, for the detection of these bacilli, mainly in the search for carriers.

Many and varying have been the methods used in these examinations. The examination of faeces by any of the approved methods has given fairly satisfactory results, but the technique in the examination of urines has not received sufficient attention.

This laboratory has been called upon to make examinations of urines from convalescing and convalescent typhoid and paratyphoid fever patients, for the most part troops returned from active service.

It may interest some, more particularly those engaged on similar work, to know the methods that have been adopted in this laboratory.

Method.

The urine is collected in a six or eight ounce sterile bottle, with the usual aseptic precautions. This is forwarded to the laboratory as soon as possible after collection.

Approximately 12 c.cm. of the urine are placed in a test tube, and boiled in a water bath for three to five minutes. The test tubes are allowed to remain in the bath until cool.

This portion of the specimen is then used for ascertaining the reaction by titration; $\frac{N}{10}$ sodium hydrate or hydrochloric acid is used for the titration.

One hundred c.cm. of the urine are then placed in a sterile Florence flask, and the reaction adjusted to + 1%. Ten c.cm. of a 10% peptone solution are added, and the whole incubated at 37° C. for 24 to 48 hours. After 24 hours' incubation, lactose-bile-salt-agar plates are inoculated, and these are incubated for 18 to 24 hours. The urine, in the meanwhile, is again incubated for another 24 hours, and if the plates show no development of colonies, they are again inoculated, i.e., with the urine which has been incubated for 48 hours.

The non-lactose fermenting colonies are picked off the plates and inoculated into tubes of mannite broth with inverted tubes.

The subsequent procedure is the same as is adopted by the majority of workers.

The advantages of this method are:—

- (1) That one is enabled to examine a relatively large quantity of urine.
- (2) The reaction is favourable to bacterial growth.
- (3) There is an abundant, available food supply.

- (4) The bacteria present are given time to adjust themselves to artificial conditions.

If unadjusted urine is used to add to a liquid culture medium, the reaction of the medium may be rendered unfavourable to bacterial growth. The fact that the majority of urines have a reaction unfavourable to bacterial growth is not recognized in the greater number of the methods advocated. It is not uncommon to find urines with an acidity of from 10% to 15%, and even alkaline urines are occasionally met with.

In other methods, reliance is placed upon the examination of too small quantities of urine.

The method above described has given very good results. Urines treated in this way have given bacterial growth, while control specimens (unadjusted) on incubation have shown no bacterial growth.

So far I have not seen recorded a similar method to the one adopted.

Recently Hort¹ reported that he had obtained a higher percentage of positive results when he incubated the urines before plating. He also suggested that the addition of albumin-peptone might be of advantage. But he failed to realize that many urines are either too acid or alkaline in reaction to allow of bacterial growth. I consider that the reaction of the medium is of supreme importance, for the bacilli of the typhoid-paratyphoid group are very susceptible to a change in reaction.

Reference.

- ¹ Hort, Edward C., *British Medical Journal*, December 18, 1915.

Reviews.

PHYSIOLOGY FOR NURSES.

A simple but clear account¹ of elementary physiology, for use by nurses in their period of training, has been prepared by Dr. W. B. Drummond. It aims at providing such information of the functions of the human body as is needed for an intelligent appreciation of the work of the different parts of the human frame. A number of chapters are included, which deal with the anatomy of the skeleton, the arrangement of the muscles on the trunk and limbs, the form and relations of the principal viscera, the structure of the eye and other sense organs, and the architecture of the nervous system. Considerable space is allotted to the microscopical features of the tissues and organs. The attention of the probationer is drawn to the need of actual inspection of these structural arrangements for a right understanding of them. Bones are to be handled and sections examined with the microscope. The various functions of the different systems are briefly described. The topics for more special study are well selected, and embrace those on which special knowledge by a nurse is desirable. The book is illustrated by 81 figures, mostly wood-cuts, which are, on the whole, characterized by simplicity and clarity. The author is able to produce a readable book, which will serve well its purpose.

PAINLESS CHILDBIRTH.

Dr. Davis' brochure² of 134 pages deals with the advantages of nitrous oxide-oxygen analgesia in labour. The apparatus required and technique are described. The unwieldy nature of the former will mitigate against its employment in private practice. The administration is com-

menced when "the cervix is fairly well dilated and the uterine contractions coming every few minutes." It may also be used in obstetric operations.

We do not endorse the advice "that the physician follow the progress of labour by means of rectal examinations." We think the second pelvic grip in abdominal palpation is more in accord with modern obstetrics. The twilight sleep method of scopolamine and morphine is decried.

There is much interesting reading in this little book, and it is well worth careful perusal. The present-day unnecessary mortality from puerperal sepsis receives attention, and if the pages devoted to this subject were carefully perused and applied in practice, many valuable lives would be saved.

SKIN AND VENEREAL DISEASES.

A special volume of the Practical Medicine Series has been devoted to the subject of skin and venereal diseases.³ This volume has been edited by Dr. Oliver Ormsby, in collaboration with Dr. James Mitchell. It consists of a review of the literature on skin and venereal diseases during 1915, compiled mainly from articles published in the various medical journals in England, Europe and the United States of America. There are in some instances photographs illustrating the cases described. Attention has been called to the greater prevalence of venereal and certain cutaneous diseases, as a direct result of the war, and to the possibility of an increase of leprosy among soldiers due to contact in districts where it is endemic. But little space has been devoted to the treatment of dermatoses. This section, moreover, does not disclose much that is new, and is mainly confined to the Röntgen ray treatment of ringworm of the scalp. The chapter on syphilis is good, but a considerable portion deals with the consideration of Wassermann reaction. The book is of interest mainly to those directly associated with dermatology, as many of the cases recorded are those of unusual skin eruptions. The final 23 pages are devoted to miscellaneous articles.

Medical Matters in Parliament.

NEW SOUTH WALES.

On April 5, 1916, the Honourable J. D. Fitzgerald moved in the Legislative Council the first reading of a Bill to regulate, incorporate and promote the objects of the Illawarra Cottage Hospital. In the debate in committee, the Honourable Dr. J. B. Nash raised objection to the inclusion of a clause providing power to appoint a medical school and nursing and training staff. He argued that Coledale, where the hospital was situated, was a very small place, and that it was a most improper thing to give the directors power to start a medical school. He maintained that the hospital would not become large enough to justify the institution of a medical school, with the appointment of special teachers, within the lifetime of the members. The Honourable J. D. Fitzgerald urged that the object of the clause was to obviate the necessity of appealing to Parliament again, when the time came for the directors to carry this provision into effect. The clause was agreed to, and the Bill passed through the remaining stages.

On April 10, 1916, Mr. McGirr raised the question in the Legislative Assembly whether it would be expedient for the Government to appoint a Royal Commission to enquire into the matter of venereal disease, in view of the fact that a Select Committee was sitting at the present time. He referred to the deputation, consisting of Sir Herbert Maitland, the Dean of Sydney and Mr. McIntosh. The Premier, in his reply, stated that there was no reflection on the work of the Select Committee. In view of further developments, however, the suggestion, which had previously been made that a Royal Commission should be appointed for the purpose, had been revived. The recommendations of the deputation had been sent to the Chief Secretary. A searching, rapid enquiry was required, in order that the necessary legislation might be prepared for next session.

¹ Physiology for Nurses, by W. B. Drummond, M.B., C.M., F.R.C.P. (Edin.); 1915. London: Edward Arnold; 8vo., pp. 210, with 81 illustrations. Price, 2s. 6d. nett.

² Painless Childbirth, Eutoclia, Nitrous Oxide-Oxygen Anaesthesia, by Carl Henry Davis, A.B., M.D., 1915. Chicago: Forbes & Co.; Crown 8vo., pp. 124. Price, 4s. 6d.

³ The Practical Medicine Series: Vol. IX., Skin and Venereal Diseases, edited by Oliver S. Ormsby, M.D., with the collaboration of James Herbert Mitchell, M.D., under the general editorial charge of Charles L. Mix, A.M., M.D. Miscellaneous Topics edited by Harold N. Moyer, M.D.; Series 1915. Chicago: The Year Book Publishers; pp. 240. Price, 6s.

The Medical Journal of Australia.

SATURDAY, APRIL 15, 1916.

Professional Secrecy.

In a recent magisterial inquiry at Parramatta, Sydney, in a case of death following miscarriage, the Coroner who held the inquiry put strong pressure upon a medical witness, who had attended the deceased before her death, to make him admit that he had acted wrongly in omitting to inform the police of his patient's condition. In giving his finding the Coroner also made an appeal to the medical profession in the district to report to him or to the police any case of miscarriage, in which a doubt might be felt as to whether it had been brought about voluntarily or not; and, in making the appeal, he sought to make it appear that, although solicitors ought not to disclose their clients' secrets, the same rule did not hold between a medical attendant and his patient. He urged that, in the case of a patient suffering from miscarriage, it was the medical attendant's duty to inform the police, unless he was satisfied that the miscarriage had not been artificially induced. In support of his argument, he cited a well-known text-book on medical jurisprudence, to the effect that a communication from a patient to his medical adviser is not privileged in the same way that a communication from a client to his solicitor is privileged; but he omitted to state that the so-called "privilege" has nothing whatever to do with the question of a medical man giving information to the police about a patient under his care. The privilege referred to is protection from disclosure by a witness, when giving evidence in a court of law; and a solicitor in the witness box is, for very good reasons, not compelled by law to divulge his clients' secrets. It is different with medical witnesses in communities (with certain exceptions) under English law. In these communities, medical men giving evidence in a court of law are not allowed to withhold information acquired by them in the course of their professional relations with their patients. That is to say, no privilege at-

taches to a patient's secrets so as to protect them from being divulged by the medical attendant when questioned in the witness-box in regard to them. Beyond that, however, the rule does not go; and, in fact, it has no application in the connexion in which the Coroner used it.

In regard to the duty of the medical attendant in the class of case referred to the position is clear, and ought not to be obscured by side issues. It may be stated briefly as follows: Generally speaking, the medical attendant has the duty not to divulge his patient's secrets; and he incurs the risk of having to defend a libel action, if he does, unless the disclosure is made in the witness-box in a court of law, and under the compulsion of law. The fact that his patient has committed a criminal offence does not relieve him of this duty. In the event of the patient's death, however, it is not right that he should do anything, either directly or indirectly, to protect the reputation of the deceased, or anything which might have the effect of shielding anyone to whose wrongdoing the death might in any way be attributed. If he is not satisfied that the death was due to common illness, or what is spoken of as "natural causes," he should refrain from giving the usual death certificate, or any substitute for it; and he should let subsequent events take their course. He should also, however, for his own protection as well as on public grounds, see to it that the police authorities are informed that the death has occurred, and that it may be a proper subject for a Coroner's inquest.

If medical practitioners, in their zeal for the elimination of crime, were systematically to ally themselves with the police as detectives and informers, there would possibly, for some time at all events, be an increase in the number of prosecutions, not only for the unlawful procuring of miscarriage, but also for other crimes; but the alliance would probably defeat its own ends, because criminal patients would have cause to regard doctors as enemies, and so would do all in their power to avoid them. Thus suffering would have to go unrelieved, and the usefulness of the medical profession would be curtailed.

The whole question of the obligations of medical practitioners in cases of suspected criminal abortion

has been fully investigated recently, both by the Royal College of Physicians of London and by the Council of the British Medical Association in England. A report on the subject was submitted by the Council at the Annual Representative Meeting, 1915 (see *British Medical Journal*, Supplement, July 31, 1915, p. 57), and an authoritative article on the subject appeared in the *British Medical Journal*, February 5, 1916, p. 206, entitled "The Duties of Medical Practitioners in Cases of Criminal Abortion." The Council of the New South Wales Branch also notified the members on two occasions in 1915 as follows:—

"That the Council is of opinion that a medical practitioner should not, under any circumstances, disclose, except under compulsion of law, without the patient's consent, information which he has obtained from that patient in the exercise of his professional duties."

"That the Council is advised that the State has no right to claim that an obligation rests upon a medical practitioner to disclose, except under compulsion of law, information which he has obtained in the exercise of his professional duties."

TRENCH NEPHRITIS.

The form of acute nephritis spoken of at the present time as trench nephritis has attracted a great deal of attention within recent months, on account of its frequency, and because it has, to a certain extent, taken the place of dysentery and enteric fever in the western front. From the scientific point of view, the chief interest of this affection lies in the fact of its apparent epidemic form, and any contribution throwing light on its aetiology and pathology is therefore very welcome. An important discussion on this affection took place at a meeting of the Sections of Medicine and of Pharmacology and Therapeutics of the Royal Society of London, on February 15, 1916. Dr. Langdon Brown opened the discussion, and, following him, Sir William Osler, Dr. F. W. Andrewes, Dr. Mackenzie Wallis and Dr. R. G. Abercrombie expressed their views and recounted their experiences. From the epidemiological aspect, a few facts have been recorded. While acute nephritis is a comparatively uncommon disease among adults of military age, there were no less than 14,117 cases in one year during the American Civil War (1862-3). Then, as at present, the troops had participated in a forward dash, and, after the check, had been subjected to prolonged warfare

in trenches. In the present war, the number of cases from August 4, 1914, to the end of June, 1915, was 1,062. Dr. Langdon Brown calls attention to the fact that this affection did not occur, at all events to any marked extent, in the Boer War, or in the Russo-Japanese campaign. Exposure to cold, climatic conditions, impure water supply, intestinal toxæmia and acidosis have been suggested as causes, but have been excluded after due enquiry. The French have suggested that the epidemic was due to a suppressed form of scarlatina. Dr. Langdon Brown considers this explanation untenable, and other observers agree with him in this view. The nephritis has proved to be a glomerular one, with little or no fatty changes. Pathologically, there is nothing to distinguish it from the other acute inflammatory conditions of the kidney. On the other hand, a remarkable difference between the urine from persons suffering from trench nephritis and that of scarlatina patients was described by Dr. Mackenzie Wallis. When inoculated into laboratory animals, the urine from the trench nephritis patients produced severe and fatal illness, developing on the eighth day. The same experiment with scarlatinal urine did not produce this result. When the urine was heated to 55° C. for one hour, no illness was produced. The urine filtered through porcelain, but not heated, did not differ from unfiltered, unheated urine in its power to produce illness. It therefore would appear as if trench nephritis were an infective process, which was caused by a filterable virus. Strong evidence was adduced in favour of the disease being communicable from man to man. Several important details have, so far, not been cleared up. These include the determination of the length of time elapsing between the exposure of the patient to infection and the first signs of illness; the question whether infection ever passes from man to man when the urine is voided into proper receptacles and promptly disinfected; and whether one attack protects the individual against a subsequent infection. It is stated that trench nephritis appeared among the enemy troops at about the same time as it appeared in our own lines. Since the incidence has been comparatively high, it is probable that further information may be forthcoming within the course of this year.

THE SAFETY OF THE TRAVELLING PUBLIC.

The Chief Commissioner of the New South Wales Government Railways and Tramways issued, in February, a new set of regulations for vision, colour sense and hearing tests for employees. In these regulations the standards for the various groups of employees are fixed, and certain general conditions are prescribed. All persons entering the service must be in good health, of sound constitution, and, as far as can be judged, free from organic, functional or mental disease or from defects in figure or muscular development. An appearance indicative of intemperate habits will disqualify.

The acuity of vision required varies according to the branch of service. The vision is tested by means of Snellen's test types at a distance of 20 feet. Locomotive cleaners and firemen, porters, shunters, tramway conductors and persons, who in the ordinary course of promotion may eventually be employed in positions connected with the running of trains or trams, or with the safety of the lines, should have $\frac{6}{8}$ vision in each eye. Firemen and cleaners are to be examined after homatropine has been instilled in the eyes. Hypermetropia of more than 0.75 D is not passed, but in practice it is probable that 1 D in one eye may be allowed. Men already acting as drivers, firemen or signalmen will not be dismissed from their positions unless the vision with both eyes is less than $\frac{6}{9}$, provided that the vision of one eye is not less than $\frac{6}{24}$. When the vision is less than $\frac{6}{9}$, but not less than $\frac{6}{12}$ with both eyes, neither eye being less than $\frac{6}{24}$, employees will not be dismissed if they can pass a satisfactory practical test with both eyes open, with fixed and flag signals at a distance of 700 yards. In the case of drivers with less than $\frac{6}{8}$ vision, the cause of the defect must be ascertained, and, in accordance with this find, the date of the next examination will be fixed. Under ordinary conditions, the vision of drivers will be re-tested every two years, while that of men connected with the running of trains or trams, or with the safety of the lines, every four years. After the age of 45 years, the re-examination is to take place every two years, or more frequently if the Medical Officer considers this necessary. After an accident, in which the exhibition of a wrong signal or the misinterpretation of a signal has been a contributory cause, the vision and hearing of every employee concerned must be examined forthwith.

The colour sense is to be tested by means of a modified Williams' lantern, with $\frac{1}{4}$ inch openings, at a distance of 20 feet, and by means of Stilling's plates. In re-examinations, the employees are required to distinguish the colours of the lantern correctly, but testing with Stilling's plates is not prescribed. Moreover, purple and blue lights will be eliminated in the case of men already in permanent employment in the service.

The hearing tests for men who apply to enter the service include the counting of the ticking of a ratchet aecometer at a distance of 20 feet, and the voice test. At the re-examinations the men are re-

quired to hear ordinary conversational voice at a distance of 10 feet.

It thus appears that the standards of acuity of vision and of hearing, and of the reliability of the colour sense are high enough to protect the public against danger arising out of the failure to see or hear and recognize the signals governing the movements of trains or trams or arising from the failure to detect defects in the permanent way or in the rolling stock. The interests of the employed are taken into consideration as far as is consistent with the safety of the public. The exclusion of Holmgren's tests and the substitution of the lantern test insures the exclusion of men, who, under unfavourable conditions, may not be able to differentiate colour signals at night-time. Some latitude is permitted in regard to acuity of vision, more especially in those who have already served as drivers, or in other responsible positions, and in those who are promoted from other positions of responsibility to that of fireman, signalmen or driver. But the standard in these cases is high enough to satisfy the requirements of the position. The public is protected by yet another provision. All the examinations are to be carried out by the Railway Medical Officer, or by one of his assistants, save in the case of the Lismore and Broken Hill districts, where the local Medical Officers will undertake this duty. The examining Medical Officer is empowered to use his discretion in special cases, and to judge whether an undue risk would be run were a particular man employed in a special capacity. When a man with defective vision is rejected by the Medical Officer because he has failed to pass the prescribed tests, the final decision lies in the hands of the Chief Commissioner, to whom the case may be submitted. In this way the men will be protected against hardships as far as is possible.

ANZAC MEDICAL ASSOCIATION.

Through the kindness of Lieutenant-Colonel R. J. Millard we have received the records of five meetings of the Anzac Medical Association, an association formed by the medical officers on military duty at Anzac during the Gallipoli campaign. These records will be published in the issue of April 22, 1916, a singularly appropriate date, being but a few days before "Anzac Day."

Dr. R. C. E. Atkinson, who has held the position of Medical Officer of Health under the Government of Western Australia, has been promoted to the position of Commissioner of Public Health, in the place of Dr. J. W. Hope, who resigned recently. The office of Principal Medical Officer has been separated from that of Commissioner of Health, and will not be filled until the end of the war.

The attention of readers is directed to an advertisement appearing in another part of this issue, for applicants to the position of Medical Officer of Health, in succession to Dr. Atkinson. The post is an important one, and should be attractive to practitioners devoting their attention to the administrative side of preventive medicine.

We have been requested to inform our readers that Lieutenant-Colonel J. L. Beeston will be the principal speaker at the Annual Meeting of the Sydney University Medical Society, to be held on April 27, 1916.

Abstracts from Current Medical Literature.

THERAPEUTICS

(139) Transfusion of Blood.

H. S. Satterlee and R. S. Hooker discuss the use of anti-coagulants in the process of transfusion (*Journ. Amer. Med. Association*, February, 1916). They emphasize the need of more exact knowledge of the biological changes involved in transfusion, in order to increase the certainty of its usefulness. They consider that the established tests of agglutination and hemolysis between the blood of the donor and of the recipient are sufficient in cases of transfusion for hemorrhage and for acute gas poisoning, but they do not think these tests suffice in less urgent cases. They give a list of the accidents observed in several series of cases of transfusions. They discuss three hypotheses to explain these effects after transfusion. The trypsin-anti-trypsin balance of the circulating blood may be disturbed, with the result that a serotoxin is liberated from cleavage of the serum proteins. The body cells of the recipient may be exposed to an injurious reaction between antigen and antibody present in the circulating blood. The blood, though fluid, may undergo incipient coagulative changes, due to the physical influences to which it has been subjected in process of transfer. They employ anti-coagulants to restrain this incipient coagulation at the zones of contact with foreign matter. The use of these substances, to render the blood incoagulable in mass, does not seem justifiable to these authors. They point out that the precipitation of calcium only prevents the last stages of clotting. They are of opinion that the use of paraffin is the method of choice for this purpose, but proper apparatus is required, and certain precautions are necessary for its safe employment. The action of paraffin is purely mechanical. In 13 patients transfused with the use of paraffin, no chills or febrile reactions have been observed. Leech extract or hirudin has been extensively tested. They have observed no toxic effects, such as have been noted by other workers. They have used small doses, but they have observed after-effects in six out of fourteen transfusions in patients. Their samples underwent rapid deterioration, both on keeping and on heat-sterilization. These authors have also conducted a research on the effects of mixing blood with sodium citrate and sodium meta-phosphate, and subsequent injection into a dog. Both these salts have toxic effects, so that their amount should be diminished as far as possible. They have employed sodium citrate clinically, and find that they can prevent coagulation in 300 c.cm. of blood by 120 mg. sodium citrate with the aid of their technique. This proportion is

from one-fifth to one-twenty-fifth of that usually employed.

E. Lindeman describes the reactions which followed 155 transfusions of blood by the syringe-canula system (*Journ. Amer. Med. Association*, February, 1916). In these 155 transfusions, 136,800 c.cm. blood have been injected into the veins without one death. Adults have received from 1,000 c.cm. to 1,800 c.cm. in each transfusion. Two donors have not been used for any case. No foreign substances or anti-coagulants have been employed. Agglutinating and hemolytic tests have been employed in most cases. The author describes a simple means for carrying these tests out. When positive results have been obtained by these tests the amount of blood transfused has been diminished below 700 cubic centimetres. With less than these amounts of blood, untoward results do not occur. In nine patients in which the tests have not been used, chills occurred in five cases. In 146 patients in which the quantity of blood transfused has been regulated by the tests, only thirteen cases developed symptoms of intoxication.

(140) Relative Therapeutic Value of the Cinchona Alkaloids in Malaria.

A. G. MacGilchrist has completed an extensive investigation of the relative toxicity of the alkaloids of cinchona bark for the malarial parasites *in corpore* (*Indian Journal of Medical Research*, July, 1915). This investigation has been carried out in two large jails in Alipore. The observations have been made on adult male prisoners, in whose blood the malarial parasites have been found by microscopical examination. The patients have been weighed and the dose administered has been regulated by the weight of the body. The alkaloids have been given in solution by the mouth. The drugs have been administered every eight hours until nine doses have been taken. Blood films have been made at the time of administering each dose of medicine. The total number of fever patients examined has been 599, out of which 178, or 29.7%, furnished positive evidence of malaria. Of these patients, 149 have been kept under observation for the purpose of the investigation. The relative therapeutic value of the alkaloids has been determined in the following order, hydroquinine being the most and quinidine the least effective; hydroquinine hydrochloride, then cinchonine sulphate, quinine sulphate and quinidine sulphate of equal value, optochin hydrochloride, cinchonidine sulphate and quinidine. As regards unpleasant effects, buzzing in the ears is most frequently associated with quinine and quinidine, amblyopia with quinine and cinchonine, diarrhoea with cinchonine, if administered for more than a week, and nausea with quinidine. The first notable effect of the alkaloids is to arrest sporulation. Small rings and, somewhat later, half-grown parasites, are the next to disappear. The last forms discoverable are the full-grown schizonts and gametes. It would appear that the minimal lethal doses for

the benign tertian, malignant tertian and quartan parasites are respectively about 0.1 gm., 0.15 gm. and 0.2 gm. per 70 kilos. body weight. The dosage being sufficient, the average number of hours required to cause a disappearance of the parasites depends on the number of hours needed by the parasite to reach the vulnerable stages in the developmental cycle. The author draws attention to the small amount of quinine, which is able to free the peripheral blood from sexual parasites, and which is possibly able to check the development of gametes. Such doses are rarely given in medical practice. The dose given in medical circles is generally sufficient or more than sufficient to free the blood of parasites, but the duration of the treatment is too short. To a patient in whom gametes have appeared, quinine should be administered for a space of time equal to the life-span of the gamete. If patients were really cured and disinfected, malaria would soon become a rare disease. The author suggests certain improvements in the manufacture of quinine. These are the selection of a bark containing little quinidine, the extraction of quinine for use as such, and to serve for the manufacture of hydroquinine, and the issue of the remaining alkaloids as residual alkaloids.

(141) The Therapeutic Value of Hypophosphites.

W. McKim Marriott sums up the results of an investigation in the properties of the hypophosphites in the following statement (*Journ. Amer. Med. Association*, February, 1916): There is no reliable evidence that they exert a physiologic effect; it has not been demonstrated that they influence any pathologic process; they are not "foods"; and, if they are of any use, that use has to be discovered. He reviews the history of the introduction of these substances by Churchill for the cure of consumption. He discusses the various clinical researches on the uses of these bodies. He describes the results of various pharmacologists. He gives an account of his own investigations on men and pigs. He finds that from 80% to 90% of the doses administered appear unchanged in the urine. The remainder is excreted in the faeces. The substances are rapidly eliminated from the body, so that the quantities found in the urine represent the amount secreted within twenty-four hours of the administration. In the case of pigs, it has been found that the hypophosphites cannot replace phosphates as sources of phosphorus.

(142) Systemic Poisoning by Bismuth.

W. H. Higgins reports a case of poisoning by bismuth after the use of a paste injected into the cavity of an empyema (*Journ. Amer. Med. Association*, February, 1916). Two weeks after the injection, the patient, who was a coloured man, aged 23 years, complained of sore places on his tongue. Starting on the tongue, three spots extended to the cheeks, gums and throat. Much difficulty was experienced in swallow-

ing. The patient had headache and attacks of dizziness. He became weak, lost his appetite, and was very constipated. There was no disturbance of hearing or vision. Albuminuria was present. After evacuation of the bismuth, the patient slowly recovered. Analysis of the urine revealed the presence of much bismuth and the absence of lead, mercury, arsenic and antimony. The author gives an account of a post-mortem on a patient who died six weeks after the injection of 3 oz. of Beck's paste into the pleural cavity. Intense degeneration of the tubular epithelium of the kidneys was present. The liver showed cloudy swelling. The intestines were deeply injected, and contained areas of necrosis. Micro-chemical tests revealed the presence of bismuth. The author recalls the experiences of Kocher with dusting powders containing bismuth. He observed stomatitis, gingivitis, dysphagia, nephritis and diarrhoea. One of his patients died. The conditions under which the insoluble salts of bismuth are dissolved are not at present known. Whenever bismuth sub-nitrate comes into contact with fluids, rich in proteins, some bismuth eventually passes into solution.

UROLOGY.

(143) The Lymphatics in Ascending Renal Infection.

D. N. Elsendrath and J. V. Kehn (*Journ. Americ. Med. Assoc.*, February 16, 1916) have performed 27 experiments on dogs and rabbits, with the view of determining the rôle of the lymphatics in ascending renal infections. From their observations they conclude that infection travels from the bladder to the kidney and perinephritic tissue by way of the lymphatics in the wall of the ureter and not along the mucous membrane. They have further concluded that the lymphatic capillaries of the periureteral sheath play an important part in ascending infection. They consider that the old view that infection from the lower to the upper urinary tracts travels within the lumen of the ureter must be abandoned, except when the ureter is completely obstructed by a calculus, stricture or external pressure. In their experiments they imitated as closely as possible the conditions found in human beings, by injecting cultures of micro-organisms found in urinary infections emulsified in normal saline solution into the bladder of the laboratory animal. In the early stages of the infection the infiltration is in the submucous layer of the bladder. From this situation the infiltration travels up into the ureter. It is most marked in the submucous coat in the foremost portion of the ureter. The periureteral sheath is seen to take on an important function in transmitting the infection. As the infection progresses the other coats of the ureter become invaded from without inwards, and the mucosa remains intact until the infection is well advanced. The same sequence of events can also be watched in the human ureter. The infiltration is first seen in

the renal pelvis in the sub-pelvic areolar tissue, the overlying mucosa remaining unaffected. Within the kidney the infiltration is seen at first around the renal vessels, which pass into the parenchyma to form the circinate vessels. Next the cortex between the tubules and around the glomeruli is affected, and later the medulla is invaded in the same intertubular manner. Finally, the infiltration breaks into the lumen of the tubules. In one experiment the infiltration closely followed the lymphatics, which allow of communication between the cortex, the true capsule and the perinephritic tissue. The authors are convinced that there is a free communication between the lymphatics of the bladder, ureter and kidney, and that the current is in an upward direction.

(144) The Bacteriology of Chronic Prostatitis and Seminal Vesiculitis.

H. B. Culver has been induced to undertake a study of the bacteriology of chronic prostatitis and seminal vesiculitis, more especially with reference to their relationship to arthritis, by the records of numerous cases in which joint infections had been cured or improved by drainage of a focus in or about the seminal vesicles, or by seminal vesiculotomy (*Journ. Americ. Med. Assoc.*, February 16, 1916). Other investigators have obtained varying results of the examination of prostatitis and seminal vesicle discharges. All are agreed, however, that a mixed pyogenic infection is the rule, and that the gonococcus is never present, save in acute suppurative conditions. In his experiments, the author did not attempt to separate the discharge from the prostate from that from the vesicles. The method which he found satisfactory was as follows: No preliminary irrigation is employed. The patient is given 15 grains of hexamin, and the same dose of the acid phosphate of soda, three times a day for two or three days before collecting the material. The *glans penis* and the meatus are thoroughly washed with soap and water, and allowed to dry. The glans is then painted with 50% tincture of iodine. The *fossa navicularis* is thoroughly swabbed out with the same solution, by means of a small applicator. The patient had previously been instructed to have a partially-filled bladder. He then passes urine. The prostate and seminal vesicles are then stroked and the fluid caught in a wide-mouthed, sterile vessel, as it drops from the meatus. Cultures are made, both under aerobic and anaerobic conditions. No growth was obtained from the fluid collected from 12 normal control patients. Material was examined from 34 patients; in 26 there were associated joint lesions. Other foci of infection were excluded as far as was possible before the examination was undertaken. In 85% of the patients there was a history of one or more attacks of gonorrhoea. There were no symptoms referable to the genito-urinary tract in 52% of the patients. Some of the patients dated their troubles back months or years, to the

time of an acute gonorrhoea. In these patients there were symptoms referable to the genito-urinary apparatus. Micro-organisms were recovered from 24 of the 34 patients, i.e., in 70%. The examination was conducted not more than three times in the remaining 10 patients. Repeated massage and culture may be necessary before the infective nature of some of these processes can be proved. *Staphylococcus albus* was present more commonly than any other organism; in each case it was associated with some other organism. Streptococci, gonococci and diphtheroid bacilli as well as a few other bacteria were found. Anaerobic bacteria were isolated from four different patients. These were all cocci, and were recovered after repeated examination. The growth was slow, the first signs appearing on the third or fourth day. No relationship was noted between any one organism and any particular group of symptoms. The local symptoms were chiefly those due to bladder irritability, such as frequent and imperative micturition, and an intermittent urethral discharge. An attempt was made to ascertain by various reactions (e.g., skin-tests, agglutination and opsonic determinations), whether or not the patients reacted to the organisms located. Focal reactions, following tuberculin injections, were almost constant, and painful sensations were noted, especially in those joints which were in a sub-acute condition. General reactions were also frequent. This was manifested by fever, malaise, etc. Five hundred million organisms were usually required to produce a reaction, although a billion were necessary at times. The author has drawn the following conclusions: Anaerobic, as well as aerobic, organisms may be the exciting cause of chronic prostatitis and seminal vesiculitis. Anaerobes were obtained from one-sixth of the total number of reacting patients. This may help to explain some of the many sterile cultures obtained when aerobic methods are employed. It also explains the negative results obtained from smears. The organisms isolated in 66% of the patients tested seemed to be specific for the infected individual. The evidence of this was found in the positive reactions following the injection of analogous bacteria, as compared with the negative results following the injection of other organisms. In many cases of prostatitis and seminal vesiculitis, it would seem from a single examination that the process was non-infective; repeated examinations, however, frequently revealed the infective nature of the affection. Chronic infections of the prostate and seminal vesicles appear to be partially or wholly responsible for cases of subacute and chronic arthritis. The specific focal reactions speak strongly in this direction. Drainage of the focus of infection in the prostate or vesicles, either by expression or by operation, together with the raising of the antibody content of the patient's blood by inoculations of killed organisms, is apparently advantageous in the treatment of these conditions.

LIFE INSURANCE POLICIES.

We have received various enquiries concerning the insurance of medical men on active service. It has been pointed out that non-combatants should not be penalized by the imposition of additional premiums for life insurance, in view of the fact that the risks are smaller than those of the men in the fighting line, and it has also been urged by one correspondent that "it seems an extortionate amount to ask a man to pay, especially as his mission is to do his best in his own way to protect the goods and property of these benevolent companies." It appears to us that the position is not clearly understood by some members of the medical profession, and the following information may therefore be of some value in assisting practitioners to see how they stand when volunteering for service with the colours.

Life insurance policies issued under ordinary conditions, in times of peace, may contain a clause limiting the insurance to certain parts of the world. Should the insured move to a country beyond the limits of the area recognized by the insurance company, he is required to obtain the endorsement of the directors. Failing this, the policy becomes null and void. In other instances, a "war clause" is inserted. The effect of these restricting clauses on the policy during the time of war is obvious, but it is necessary to explain the practice in regard to policies containing these clauses for a proper understanding of the position. It will perhaps be wise to preface this explanation with a brief statement concerning the insurance societies themselves. It is, of course, quite an erroneous idea to regard them as benevolent undertakings. An ordinary insurance society or company is a trading concern, which aims at profits, just as a banking or other company does. A mutual insurance society, it is true, takes a somewhat different position, but, in view of the fact that the insured stand in the relation of shareholders, profits are accumulated as in ordinary trading concerns, and part of these profits are distributed among the policy-holders as bonuses. The stability of the companies depends on the accurate adjustment of the premiums to the risks incurred. Actuarial tables have been drawn up, in order that the expectation of life may be calculated with some degree of accuracy. On the basis of these tables the insurance companies are in a position to anticipate the average length of life of a "first-class life" at each age period. The premiums calculated on this basis should suffice to cover the risk incurred, and leave such margin for expenses and profits as may be desirable. The calculations on which insurance policies have been based within the British Empire have been made in Great Britain, and, consequently, when applied to the conditions obtaining in the Commonwealth, it has been found that in actual practice the insurance companies stood to gain not inconsiderably. The life of a healthy individual within the Commonwealth, at any given age, has been found to be better, actuarially speaking, than that of a healthy individual at the same age in England. How much better it is impossible at present to determine. Under these conditions, more attractive policies have been issued by some of the Australian companies than the British companies have been able to offer. Profits accrue at a greater rate; premiums are lower; and restricting clauses have been omitted. The clauses to which we have referred do not appear in the older Australian policies. It therefore follows that all Australian policies issued before the outbreak of war in August, 1914, which do not contain a war clause or other clause limiting the effectivity of the policy to the Commonwealth, remain in force without extra premium, and without any reduction of the amount insured, even when the holder takes up service with the naval or military forces.

At the time of the South African war, the majority of the British companies were issuing policies containing a war clause. The Prudential Assurance Society, in London, determined, in March, 1901, that no extra premium would be required of soldiers proceeding to the front, provided that the amount assured did not exceed £250. For policies above this sum, an additional premium was charged. This charge was made in virtue of a clause providing that if an assured became a soldier or a sailor, the directors could determine the amount of extra premium necessary to keep

the policy effective. The London companies charged from five to seven guineas per cent. additional premium. That means that for every £100 the policy-holder would have to pay over and above the usual premium the sum of £5 5s. to £7 7s. per annum during the time he was on active service.

Shortly after the outbreak of the present war, the English offices increased the premium for policies held by combatants serving with the British or allied forces by ten guineas per cent. At the end of August the Life Offices' Association of London considered the whole question, and recommended the English companies to include war risks without further premium, as long as the holder was engaged in home service. This would apply to old policies, as well as to new proposals. They suggested that an additional premium of from 2% to 5% be charged on old policies for foreign service, and from 3% to 7% on new policies. It may be pointed out that industrial policies issued by the Prudential Assurance Company contained clauses providing that if the assured became a combatant in active naval or military operations, the Directors were empowered to increase the premium or to reduce the sum assured. The same company issued a policy containing a clause empowering the Directors to increase the premiums or reduce the sum assured if the assured took part in any military or naval operation during actual warfare, or in any insurrection or any expedition or operation of a warlike character, either as a combatant or as a non-combatant.

In the *Insurance Mail*, a London publication, a note appeared on December 4, 1915, announcing that the Prudential Assurance Company had come to the conclusion that the additional premiums charged by the London offices were no longer sufficient to cover the risks incurred, and that, in future, the extra premiums would vary from ten to thirteen guineas per cent., or, as an alternative, the sum assured would be reduced by from £60 to £75 for each £100 assured.

It thus appears that, at the present time, the holders of old English policies containing restricting clauses, and of all new policies, are required to pay an additional premium, or to be content with a considerable reduction of the sum insured when they proceed on active service abroad. This applies to medical men as well as to combatants. In certain cases, however, the penalizing provisions are not enforced when the medical officer is employed at a base hospital. Since August, 1914, it has been the general practice of Australian offices to require an additional premium of from 5% to 10% of the sum assured on new policies, when the policy-holders are engaged in naval or military operations outside Australasia. This additional premium is payable only during the continuance of the war. In some cases it may be paid in half-yearly instalments. The interpretation placed on the expression "engaged in naval or military operations" is very wide, and includes non-combatants within the zone of naval or military activities. The need for this is obvious. In the first place, the risk to life is as great among non-combatants as among combatants in the fighting line, and it has actually been found that casualties have been relatively more frequent among regimental surgeons than among the rank and file. In the next place, the risk includes that of disease, and, as is well known, the incidence of infective disease in France, in Egypt, and in Gallipoli has been very high indeed. Medical officers are exposed to this risk not less than the troops in the trenches and in camp. On the other hand, the Australian and many English offices are prepared to accept the additional risk when the medical officers remain at a base hospital far removed from the real danger zone.

Medical men volunteering for foreign service should not be in doubt as to the wisest course to pursue. If they hold policies of sufficient amount with Australian offices, no extra premium will be required. If they hold policies with English offices, they will be required to pay an additional premium of a sum varying from £21 to £52 10s. on a £1,000 policy. In the event that the practitioner wishes to take out a new policy, the additional premium required by the Australian offices would amount to from £50 to £100 on a £1,000 policy. English or Canadian offices will charge him from £150 to £180 extra on the same policy.

British Medical Association News.

ANNUAL MEETING.

The Annual Meeting of the Western Australian Branch was held at the Perth Public Hospital on March 16, 1916, Dr. Merryweather, the Vice-President, in the Chair.

Two patients were exhibited before the usual business of the annual meeting was proceeded with. Dr. J. J. Holland showed a man with a tumour of the penis. The members expressed the opinion that the affection was gouty. Dr. Merryweather showed a man for Dr. T. Ambrose. The larynx had been removed for malignant disease, while the lymphatic glands had been removed at a previous operation. The members congratulated Dr. Ambrose on the successful result, and Dr. Gill was requested to convey the message to him.

The Secretary's report was read. On the motion of Dr. D. P. Clement, seconded by Dr. R. C. E. Atkinson, the report was adopted.

Honorary Secretary's Report for the Year 1915-1916.

During the twelve months, nine ordinary general meetings and two special meetings were held.

The average attendance was seventeen; a good number, considering how many members were away.

The following members very kindly read papers: Drs. Lotz, Hadley, Couch, Clement, Lillies, Paton and Webster. The success of the meetings is entirely owing to the trouble taken by these men, and to numerous other members, who showed cases and specimens, and read notes of cases, etc.

Dr. Teague, President of the Branch, has been absent on active service in Egypt during the greater part of the year. You will be glad to hear I am told that he is in good health, and it is hardly necessary to tell you how highly returned soldiers speak of him and his work.

It is with very great regret that I have to report the death of two of our members on active service. Dr. Keith Levi and Dr. Anthony Corley were both killed in action, the former while attending to the wounded on the battlefield, and the latter, not in the capacity of a Medical Officer, but as a Captain in the fighting line. The condolence and sympathy of this Branch has been extended to the relatives of these two men.

The war has made a great demand on the medical profession, and already 31 members of this Branch are on active service in England and Egypt, etc. In addition, 16 more are doing military duty in this State. Four other members have gone to England, but I do not know if their services have been accepted for the Army.

Two members have gained especial distinction, viz., Drs. Brennan and McWhae.

We have to mourn the loss of Dr. Montgomery, Inspector-General of the Insane. He was always a prominent member, and was at one time on the Council. He always took a keen interest in everything pertaining to the welfare of the Branch. By the unanimous wish of the Council, a letter of condolence was sent to Mrs. Montgomery.

A deputation was sent to the Perth City Council, with reference to the registering of patients, diagnoses now being required to be kept at private hospitals. Consent was obtained to entering the cases as "medical," "surgical," "midwifery," instead of exact diagnoses.

In reply to a wire from Dr. Hayward, Dr. Couch went to Melbourne, to a special meeting of the Federal Committee, to consider medical emergencies in connexion with the war.

As a result, the whole profession in this State was canvassed as to the help they were willing to give, both abroad and at home.

A special meeting was held to consider the Health Bill, which was before Parliament. Dr. Saw brought the views represented before Parliament, with results that must be considered satisfactory.

In conclusion, I hope that, before the next annual meeting, we will be able to give a great reception to those members who have sacrificed so much at their country's call.

(Signed) CHARLES W. T. WOODS,
Hon. Secretary.

It was moved by Dr. E. A. Officer, seconded by Dr. G. W. Lillies, and resolved,—That the Treasurer's report be adopted.

Dr. F. Gill moved the adoption of the Council's report. The motion was seconded by Dr. R. C. E. Atkinson, and carried.

Report of the Council for the Year 1915-1916.

During the year the Council met 13 times. Fortunately, there has been no occasion for the Ethical Committee to meet since April, 1914.

The average attendance at the Council meetings has been nearly seven, out of a total membership of eight. However, during the greater part of the year, only seven members have been resident in Australia, the President and the Honorary Treasurer having gone overseas with the military forces, and only the latter was replaced. Dr. Ramsay agreed to act as Honorary Treasurer during Dr. Trethowan's absence. In addition, three other members of the Council have been doing military duty in the State.

In consequence of some correspondence with the two district medical officers, all other district medical officers in the State were written to, asking them to name any general grievances they were suffering from. At the same time, it was pointed out that there was no desire on the part of the Association to stir up strife. A number of replies were received, but the only general complaints were as to the inadequacy of the fees paid of post-mortem and court fees. The Council quite agreed that these were very genuine grievances, but it was felt that the times were hardly propitious for pressing for these reforms. They can only be altered by Act of Parliament. The matter was therefore postponed.

Copies of the Ethical Code were sent out to all members.

There has been considerable correspondence with the Principal Medical Officer and the Defence Department re the supply of medical officers; also re treatment of returned sick and wounded soldiers.

The Fund raised in aid of the Belgian doctors amounted to £89 15s., and has been forwarded to the Treasurer of the fund in London.

A State Medical Committee has been formed, to make recommendations re artificial limbs, and advise re technical training, etc., for returned soldiers. Doctors Merryweather, Saw and Lotz were appointed.

The Association having been asked to appoint one member to the State War Council, Dr. Saw was appointed.

Several lodge agreements were brought up before the Council, and most were satisfactorily arranged. As a consequence of the troubled times, these matters have not been pressed so strongly as before.

During the year, nine new members have been elected, namely: Drs. Collins, Young, Webster, Juett, Connolly, Silberthau, Gellé, Richards and Hemsted.

In accordance with a resolution passed at a general meeting, Mr. Nielson Hancock was appointed paid Assistant Secretary, and has given most valuable assistance.

At the last meeting, held a few days ago, the proposed bill for the registration of opticians as qualified refraction testers, was discussed. As a result of an invitation from the Vice-President, Dr. Paton attended and explained his views. After some discussion, it was decided to oppose the proposed bill, and to ask Dr. Paton to convey this opinion to the meeting of opticians to be held the following evening. The matter is still not settled, but it is understood that the opticians are anxious that their views and those of this Association should coincide if possible.

It was also decided to nominate Dr. Hayward as the representative of this Branch in England.

R. C. MERRYWEATHER, Acting President.
CHARLES W. T. WOODS, Hon. Secretary.

March 15, 1916.

A discussion ensued on the inadequacy of the fees paid for making post-mortem examinations and for giving evidence at Coroners' inquests. It was determined that the further consideration of this matter be deferred to a later date. It would be necessary for fresh legislation to be passed by Parliament, and it was recognized that the present time was unpropitious for approaching the Government.

The result of the ballot for the election of office-bearers and members of the committee was announced:—

President: Dr. R. C. Merryweather.

Vice-President: Dr. J. K. Couch.

Ex-President: Dr. H. O. Teague.

Honorary Treasurer: Dr. J. E. Ramsay.

Honorary Secretary: Dr. C. W. T. Woods.

Members of Council: Drs. R. C. E. Atkinson, D. P. Clement and F. A. Hadley.

Members of the Ethical Committee: Drs. R. C. E. Atkinson, D. P. Clement and J. E. Ramsay.

Honorary Auditors: Drs. K. Moss and A. E. Randall.

Dr. Merryweather reported that the State Medical Council had become a farce, since no meetings had been held recently. All the work was being done by the Federal authorities, through the Red Cross Society.

Dr. Watch gave notice of the following motion, to be brought up at the next meeting:—

That in order to facilitate the collection of annual subscriptions, this Branch approves of instructions being given to the Honorary Treasurer to adopt the method of issuing demand bank drafts.

Dr. Cuthbert read a paper by Dr. Nyulasy, on "General Hemorrhage Peritonitis." Dr. Couch discussed the paper, and remarked on the abuse of the curette.

Naval and Military.

The following has appeared in the *Commonwealth of Australia Government Gazette*, No. 40, under date of March 30, 1916:—

Naval Reserve Forces.

Termination of Appointment.

The temporary appointment of Norman Pern, M.R.C.S., L.R.C.P., as Acting Sub-District Naval Medical Officer, Port Fairy, is terminated as from 1st February, 1916.

His Excellency the Governor-General, acting with the advice of the Federal Executive Council, has been pleased to approve of the following appointments being made in the Australian Imperial Force, to take effect from 1st March, 1916:—

Army Medical Corps.

To be Captains—

Captain J. J. McMahon, A.A.M.C.

Captain J. B. Metcalfe, A.A.M.C.

Captain W. W. W. Chaplin, A.A.M.C.

Captain (provisional) A. W. H. a'Court, A.A.M.C.

Captain H. C. E. Donovan, A.A.M.C.

Captain F. C. Burke-Gaffney, A.A.M.C.

Captain (provisional) A. V. Meehan, A.A.M.C.

Captain (provisional) J. S. Smyth, A.A.M.C.

Captain (provisional) S. V. Appleyard, A.A.M.C.

Captain (provisional) H. S. McLelland, A.A.M.C.

Captain (provisional) R. I. Furber, A.A.M.C.

Captain (provisional) G. R. C. Clarke, A.A.M.C.

Captain (provisional) J. McPherson, A.A.M.C.

Captain (provisional) E. J. Kerr, A.A.M.C.

Captain (provisional) E. A. Sanbrook, A.A.M.C.

Captain (provisional) E. S. Harrison, A.A.M.C.

Captain (provisional) H. M. North, A.A.M.C.

Captain N. J. Bullen, Melbourne University Rifles.

Honorary Captain F. E. Hutchinson, A.A.M.C.R.

Honorary Captain E. B. M. Vance, A.A.M.C.R.

Honorary Captain J. K. C. Laing, A.A.M.C.R.

Honorary Captain W. I. Clark, A.A.M.C.R.

Honorary Captain H. F. Dunstan, A.A.M.C.R.

Honorary Captain E. N. B. Docker, A.A.M.C.R.

Honorary Captain R. G. McPhee, A.A.M.C.R.

Honorary Captain A. E. Deravin, A.A.M.C.R.

Honorary Captain R. M. Webster, A.A.M.C.R.

Honorary Captain J. C. G. Glassford, A.A.M.C.R.

Lieutenant (provisional) C. W. Sinclair, Sydney

University Scouts,

His Excellency the Governor-General, acting with the advice of the Federal Executive Council, has been pleased to approve of the following changes, etc., in connexion with the Australian Military Forces, viz.:—

1st Military District.

Australian Army Medical Corps—

Captain P. J. Kerwin is transferred from Australian Army Medical Corps Reserve, and to be Officer Commanding, Clearing Hospital, Australian Imperial Force Camp, with temporary rank and pay of Major, at rate prescribed by Universal Training Regulation 160. Dated 1st March, 1916.

2nd Military District.

Australian Army Medical Corps—

Captain (provisional) F. E. Wall to be Secretary and Registrar, No. 4 Australian General Hospital, with temporary rank and pay of Major, at rate prescribed by Universal Training Regulation 160, whilst holding such appointment. Dated 6th August, 1915.

Captain H. R. Sear to be Major (temporarily). Dated 17th July, 1915.

Australian Army Medical Corps Reserve—

Honorary Major E. Sinclair to be Honorary Lieutenant-Colonel (temporarily). Dated 7th March, 1916.

Honorary Captain H. L. Maitland is transferred to Australian Army Medical Corps and be Lieutenant-Colonel (temporarily). Dated 17th July, 1915.

Captain M. O'G. Hughes and Honorary Captain E. W. Fairfax are transferred to Australian Army Medical Corps, and be Majors (temporarily). Dated 11th August, 1915.

Honorary Captain P. E. W. Smith is transferred to Australian Army Medical Corps, and be Major (temporarily). Dated 17th July, 1915.

Unattached List—

Major A. J. Hood, V.D., is transferred to Australian Army Medical Corps, 2nd Military District, and be Lieutenant-Colonel (temporarily). Dated 17th July, 1915.

Captain H. H. Marshall is transferred to Australian Army Medical Corps, 2nd Military District, and be Major (temporarily). Dated 11th August, 1915.

3rd Military District.

Australian Army Medical Corps Reserve—

Honorary Lieutenant A. C. D. Rivett to be Honorary Captain (temporarily). Dated 1st March, 1916.

Henry Hunter Griffith, Charles Harold Johnson, Robert Leslie Forsyth, Samuel Middleton Ware, John Canute Gordon Glassford, William Bernard Ryan, Gerald Eugene Cussen, James Alexander David Nish, and Thomas Glen Oliphant to be Honorary Captains. Dated 16th March, 1916.

Gerald Henry Fetherston, William Stanley Wilkinson, and Hedley Herefoot Ham to be Honorary Lieutenants. Dated 16th March, 1916.

Honorary Captain C. A. Stewart to be Honorary Major. Dated 10th February, 1916.

(This cancels the notification respecting this officer which appeared on page 471 of *Commonwealth of Australia Gazette*, No. 28, of 24th February, 1916.)

4th Military District.

Australian Army Medical Corps Reserve—

James Charles Robert Lind to be Honorary Major. Dated 16th March, 1916.

Harold Frank Dunstan to be Honorary Captain. Dated 6th December, 1915.

(This cancels the notification respecting the appointment of Harold Frank Kolloosche, which appeared on page 223 of *Commonwealth of Australia Gazette*, No. 17, of 3rd February, 1916.)

Walter Herbert Jermyn to be Honorary Captain. Dated 16th March, 1916.

Tom Mitchell Young, William Henry Porter, Edward John Thomas Fisher Pollard Gryst, William

Thomas Magarey, Methuselah Prisk Tregoning, and Harold Victor Moore to be Honorary Lieutenants. Dated 16th March, 1916.

5th Military District.

Australian Army Medical Corps Reserve—
Sommerville Boulnois Davis to be Honorary Captain. Dated 16th March, 1916.
Roy Gilbert Braham to be Honorary Lieutenant. Dated 16th March, 1916.

6th Military District.

Honorary Lieutenant W. B. Drake to be Honorary Captain. Dated 28th February, 1916.

1st Military District.

Australian Army Medical Corps (Permanent Services)—
Honorary Lieutenant G. P. Doyle, Australian Army Medical Corps Reserve, to be Quartermaster and Honorary Lieutenant (temporarily), with a fixed salary at rate of £275 per annum, inclusive of all allowances except travelling, whilst holding such temporary appointment. Dated 1st March, 1916.

Australian Army Medical Corps Reserve—
Andrew Stewart to be Honorary Captain. Dated 16th March, 1916.

2nd Military District.

Australian Army Medical Corps Reserve—
William Henry Crago and Thomas Storie Dixon to be Honorary Majors. Dated 10th February, 1916.

Frederick Robert Watson, William Hodgson Boazman, Noel Halford Frankl, George Arthur Brookes, Thomas Dun Bertram, and John Stuart Campbell to be Honorary Captains. Dated 16th March, 1916.

3rd Military District.

Australian Army Medical Corps Reserve—
Richard James Arthur Berry to be Honorary Major. Dated 10th August, 1915.

Australian Army Medical Corps Reserve—
Henry Fitzgerald Maudsley, John Kidd Collier Laing, Henry William James Cook, and Arthur Vincent Henderson to be Honorary Captains. Dated 4th November, 1915.

(This cancels the notification respecting the date of appointment of these officers which appeared on page 3199 of *Commonwealth of Australia Gazette*, No. 158, of 23rd December, 1915.)

The following appointments have been announced in the *Commonwealth of Australia Gazette*, No. 44, dated April 6, 1916:

Army Medical Corps.

Lieutenant-Colonel A. H. Sturdee, V.D., to be Assistant-Director Medical Services (temporarily), *vice* Lieutenant-Colonel W. W. Hearne, who resumes duty with the 3rd Field Ambulance. Dated 17th November, 1915.

Major A. H. Tebbutt to be Deputy Assistant Director Medical Services, and to be granted the temporary rank of Lieutenant-Colonel whilst holding such appointment. Dated 2nd November, 1915.

Captain C. W. Thompson to be Divisional Sanitary Officer (temporarily). Dated 19th November, 1915.

To be Majors—

Captains J. W. B. Bean, J. J. Black, A. G. Butler, D.S.O., A. H. Marks and T. E. V. Hurley. Dated 6th September, 1915.

Captains J. A. O'Brien and J. P. Kenny, Australian Imperial Force. Dated 1st March, 1916.

To be Temporary Majors—

Captains B. Quick and H. R. G. Poate. Dated 6th September, 1915.

The temporary rank of Major granted to Captain H. K. Fry is cancelled from 4th November, 1915.

To be Captains—

Captain (provisional) J. M. Alcorn, Australian Army Medical Corps. Dated 21st March, 1916.
Honorary Captains F. G. Meade and H. F. Maudsley, Australian Army Medical Corps Reserve. Dated 7th March, 1916.

Honorary Captain W. A. Harrison, Australian Army Medical Corps Reserve. Dated 9th March, 1916.
John Leslie Ross-Soden and John Forrest Gardner. Dated 29th January, 1916.

Alan Syme Johnson, Percy George McReddie and Lancelot John Hunter. Dated 1st March, 1916.
Frank Arthur Sweetnam. Dated 19th February, 1916.
Victor Marcus Coppleson. Dated 8th March, 1916.
Harvey Sutton. Dated 14th March, 1916.
Robert Leslie Forsyth. Dated 17th March, 1916.
Norman John Mackay. Dated 22nd March, 1916.

The following appointments have been terminated:—

Captain C. N. Atkins. Dated April 14, 1916.
Major J. De B. Griffiths. Dated 13th March, 1916.
Major H. C. Garde. Dated 21st March, 1916.
Major D. H. E. Lines. Dated 24th March, 1916.
Captain T. J. Henry. Dated 17th January, 1916.
Captain L. G. A. MacDonnell. Dated 24th February, 1916.
The termination of appointment of Lieutenant-Colonel J. W. Springthorpe, which appeared on page 499 of *Commonwealth of Australia Gazette*, No. 31, of 2nd March, 1916, is cancelled.

The *London Gazette*, No. 29434, dated January 11, 1916 (abstract published in the *Commonwealth of Australia Gazette*, No. 44, dated April 6, 1916) contained a note to the following effect:—

The following officers and men are commended for services in action during the operations against the German Possessions in the Western Pacific, 1914:—

Captain Brian Colder Antill Pockley, A.A.M.C. (killed in action).

In the *London Gazette*, Fourth Supplement, No. 29438, dated January 14, 1916, the following announcement appeared:—

His Majesty the King has been graciously pleased to approve of the undermentioned honours and awards for distinguished service in the field, with effect from 1st January, 1916, inclusive:—

Awarded the Military Cross.

Captain Joseph Espie Dods, Australian Army Medical Corps.

General Sir Ian Hamilton, G.C.B., has mentioned the names of a number of officers and men whose services he wished to bring to the notice of Viscount Kitchener in connexion with the operations previously described in his despatches. The following members of the Australian Army Medical Corps are named in the lists:—

Captain K. M. Levi (killed).
Lieutenant-Colonel C. Garner, M.B., Reserve of Officers.
Lieutenant-Colonel H. W. Bryant.
Lieutenant-Colonel A. H. Sturdee.
Major H. A. Powell.
Captain (temporary Major) L. W. Dunlop.
Captain J. Bentley.
Captain E. T. Brennan.
Captain H. V. P. Conrick.
Captain A. L. Dawson.
Captain A. Y. Fullerton.
Captain C. W. Thompson.
Captain W. J. Stack.
Captain J. E. Dods.
Captain L. St. V. Welch.

Public Health.

INFECTIVE DISEASES IN QUEENSLAND.

The following notifications have been received by the Department of Public Health, Queensland, during the week ending April 1, 1916:—

Disease.	No. of Cases.
Infantile Paralysis..	2
Diphtheria	26
Enteric Fever..	46
Malaria	3
Scarlet Fever..	3
Pulmonary Tuberculosis	2
Cerebro-Spinal Meningitis..	3
Total	85

THE HEALTH OF NEW SOUTH WALES.

The following notifications have been received by the Department of Public Health, New South Wales, during the month of March, 1916:—

Disease.	Metropolitan.		Hunter River District.		Remainder of State.		Total.	
	1916.	1915.	1916.	1915.	1916.	1915.	1916.	1915.
Enteric Fever	Cs. Dths.	Cs. Dths.	Cs. Dths.	Cs. Dths.	Cs. Dths.	Cs. Dths.	Cs. Dths.	Cs. Dths.
Scarlet Fever	110 13	64 7	21 1	20 —	179 3	231 17	310 17	315 24
Diphtheria	424 10	222 18	37 —	34 —	460 4	448 12	921 14	704 30
Cerebro-Spinal Meningitis	3 3	— —	— —	— —	2 —	— —	5 3	— —
Infantile Paralysis	53 2	2 —	5 —	— —	31 —	2 —	89 2	4 —
Pulmonary Tuberculosis	107 23	— —	3 1	— —	— —	— —	110 24	— —
Malaria	3 —	3 —	— —	— —	— —	— —	3 —	3 —

THE HEALTH OF NEW SOUTH WALES.

The following notifications have been received by the Department of Public Health, New South Wales, during the week ending April 1, 1916:—

Disease.	Metropolitan.		Hunter River District.		Remainder of State.		Total.	
	Combined Districts.	Combined Districts.	Combined Districts.	Combined Districts.	Combined Districts.	Combined Districts.	Combined Districts.	Combined Districts.
Enteric Fever	19 3	1 0	40 4	60 7	21 1	20 —	179 3	231 17
Scarlet Fever	60 0	2 0	99 2	161 2	37 —	34 —	460 4	448 12
Diphtheria	97 3	5 0	121 0	223 3	2 —	— —	5 3	— —
C'bro-Sp'l Menin.	0 0	0 0	1 0	1 0	— —	— —	— —	— —
Infantile Paralysis	5 1	4 0	5 0	14 1	— —	— —	— —	— —
Pul. Tuberculosis	23 0	0 0	0 0	23 0	— —	— —	— —	— —

THE HEALTH OF VICTORIA.

The following notifications have been received by the Department of Public Health, Victoria, during the week ending April 2, 1916:—

Disease.	Metropolitan.		Rest of State.		Total.	
	Cs. Dths.	Cs. Dths.	Cs. Dths.	Cs. Dths.	Cs. Dths.	Cs. Dths.
Diphtheria	91 3	54 1	145 4	— —	— —	— —
Scarlet Fever	10 0	19 0	29 0	— —	— —	— —
Enteric Fever	6 2	24 0	30 2	— —	— —	— —
Pulmonary Tuberculosis	19 8	7 3	26 11	— —	— —	— —

During the week ending April 2, 1916, eleven cases of cerebro-spinal meningitis, and one case of acute anterior poliomyelitis were notified to the Board.

INFECTIVE DISEASES IN WESTERN AUSTRALIA.

The following notifications have been received by the Department of Public Health, Western Australia, during the week ending March 25, 1916:—

District.	Enteric Fever.		Diphtheria.		Scarlet Fever.		Pulmonary Tuberculosis.		Erythrasma.		Septicæmia.		Purulent Ophthalmia.	
	Cases.	Cases.	Cases.	Cases.	Cases.	Cases.	Cases.	Cases.	Cases.	Cases.	Cases.	Cases.	Cases.	Cases.
Fremantle	2	1	—	—	—	—	—	—	—	—	—	—	—	—
Fremantle East	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cottesloe	1	—	—	—	—	—	—	—	—	—	—	—	—	—
Claremont	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Cl'rem't Rd. Dis.	—	—	—	1	—	—	—	—	—	—	—	—	—	—
Subiaco	2	4	—	1	—	1	—	—	—	—	—	—	—	—
Perth	1	1	—	—	—	1	—	—	—	—	—	—	—	—
Guildford West	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Midland Junction	—	—	—	1	—	—	—	—	—	—	—	—	—	—
South Perth	—	—	—	1	—	—	—	—	—	—	—	—	—	—
Kalgoorlie	—	—	—	1	—	—	—	—	—	—	—	—	—	—
Boulder	—	—	—	1	—	—	—	—	—	—	—	—	—	—
Kal'rie Rd. Dis.	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Northam	—	—	—	—	—	1	—	—	—	—	—	—	—	—
Albany	1	—	—	—	—	—	—	—	—	—	—	—	—	—
Norseman	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Wickepin	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Trayning	1	—	—	—	—	—	—	—	—	—	—	—	—	—
Jarrahdale	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Narrogin	—	2	—	—	—	—	—	—	—	—	—	—	—	—
Bellevue	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Kellerberrin	1	—	—	—	—	—	—	—	—	—	—	—	—	—
Toodyay	—	1	—	—	—	—	—	—	—	—	—	—	—	—
Totals	7	17	—	1	—	6	—	3	—	1	—	2	—	—

THE HEALTH OF HOBART.

The following notifications have been received by the Health Department, Hobart, during the month of March, 1916:—

Disease.	No. of Cases.
Diphtheria	11
Enteric Fever	4
Infantile Paralysis	1
Scarlet Fever	3
Pulmonary Tuberculosis	6
Total	25

SMALL-POX IN NEW SOUTH WALES.

We are informed by the Department of Public Health of New South Wales that there have been three fresh cases of variola during the week ending April 9, 1916. The three patients were admitted to the Hospital for Infectious Diseases at Newcastle on April 3, 1915. The infection has been traced to a case reported on March 23, 1916. All the three persons refused to be vaccinated.

Special Correspondence.

(By Our Special Correspondent.)

LONDON LETTER.

The General Medical Council.

The one hundred and second session of the General Council of Medical Education and Registration was entered upon on Tuesday, November 2, 1915, at the offices of the Council in Oxford Street.

Sir Donald MacAllister, the President, in the course of an inaugural address, said that the medical problems of the war continued to press on the thoughts and energies of the profession. As more men and still more answered the call of the King, more and more surgeons were required for military service. They had it on the highest authority that within the next few months every qualified man of suitable age, who was fit for the work of an officer in the medical corps, would be needed. Civil practice in many of its branches must yield place to practice with the troops and in military hospitals. The Medical War Committees in Scotland and England, which had undertaken the organization of the profession to that end, were making progress with their difficult but imperative task. They were calling on the younger practitioners throughout the country to give up their practice and prospects for war service, and on the practitioners, who remained behind, to undertake increased labour and responsibility, that the civil population might not go untended. As to the future supply of persons duly qualified to fill the depleted ranks, the prospects were dubious. Though the War Office authorities recognized that the withdrawal from professional instructions of large numbers of medical students of the first three years would have a serious effect on the future, they had deemed it inadvisable to discourage any junior student who chose to offer himself for combatant service. There was accordingly much uncertainty among junior students as to their immediate duty. It was desired that the Army authorities should give clearer guidance on this perplexing question. Many young men, who were registered as students before the war began, were meanwhile leaving the medical schools to accept commissions or to enlist in the

ranks. The result was that the prospective shortage of 250 qualified practitioners per annum, which was probable during the coming year, would almost certainly be exceeded.

A motion by Dr. McVail: "That it be remitted to the Education Committee to report to the next meeting of Council on the education of medical students in the ethical relationship of medical practitioners to the State, to their patients, and to each other," was, after a long discussion, carried by a three to one majority.

On November 3, 1915, the President authorized the following public statement in regard to the recruiting of medical students:—

The President of the General Medical Council is requested by the Council to inform the Licensing Bodies, Medical Schools, and approved Teaching Institutions, that the Director-General of the Army Medical Service has intimated to the Council his entire agreement with the Earl of Derby's decision regarding the recruiting of medical students, namely, that it is the duty of the medical students (other than those in the fourth and fifth years of study) to join His Majesty's forces. The President hopes that in every medical school steps will be taken to convey this information to the students who are eligible for military service.

The report of the Pharmacopœia Committee was presented and considered.

On November 4, 1915, the business consisted chiefly in receiving and considering reports from the various Committees.

The proceedings of the session, which were without special interest, were terminated by the usual vote of thanks to the President.

The Population of London.

An analysis of the census figures of 1911, relating to London, has been made by the Clerk to the London County Council, and was published on November 26, 1915. It contains much interesting information. In 1801, there were 1,114,644 people in greater London; four years ago the number was 7,251,358, representing an increase of 551%. In each of the three decades, 1861-71, 1871-81, and 1881-91, it added 50% or over. Between 1801-1851 it doubled; it nearly doubled again between 1851-71, more than doubled again between 1871 and 1891, and nearly doubled again between 1891 and 1911. The population of London is continually increasing, as is disclosed by the excess of births over deaths.

The average density of population in London (60 per acre) is eight times as great as that in extra-London (7.4). In Southwark (170), Shoreditch (169), Bethnal Green (160), and Stepney (159) it is the highest, and the lowest in Woolwich (15), Hampstead and Wandsworth giving 38 and 34 persons per acre. In extra-London West Ham tops the table with 61.7, and Greenford figures at the bottom with 0.3.

Some striking figures are given with regard to the population occupying dwellings of various types. Of the total London population, 75.5% was housed in ordinary dwelling-houses, 10.4% in flats, 7.2% in shops, and 3.8% in institutions; the percentages in other types of buildings being small. The 478,024 ordinary dwelling-houses contained 805,967 separate occupiers, or an average of 1.69 per house.

In every age group females outnumbered the males, and, as regards widowed, the excess was exceptionally great, the females numbering 199,986, as compared with males 75,294.

As regards the foreign population, by far the largest number came from Russia, namely, 63,105; 27,290 came from Germany, 13,803 from France, 11,668 from Italy, and 8,050 from Austria. The greatest number of foreigners found in the extra-London districts came from Germany, Russia, and France, in the order named.

Births, Deaths and Marriages.

According to the quarterly return of marriages, births, and deaths, registered in England and Wales, it appears that the number of persons married during the second quarter of 1915 corresponds to an annual rate of 20.9 per 1,000 of population, which is 4.7 per 1,000 above the mean marriage-rate in the 10 preceding second quarters, and 3.5 per 1,000 above the rate recorded in the second quarter of

1914; it is the highest rate recorded in any second quarter since the establishment of civil registration.

The births registered in the third quarter of 1915 correspond to a rate of 21.0 annually per 1,000 of the population in the middle of 1914. This rate is 4.5 per 1,000 below the mean birth-rate in the 10 preceding third quarters, and 3.2 per 1,000 below the rate in the corresponding period of 1914; it is the lowest birth-rate recorded in any quarter since the establishment of civil registration. Of the 197,492 births, 8,364 were illegitimate.

The natural increase of population in England and Wales last quarter by excess of births over deaths was 88,079, against 117,552, 112,055, and 111,577 in the third quarters of 1912, 1913, and 1914 respectively.

The deaths registered last quarter correspond to an annual rate of 11.6 per 1,000 persons living; this rate is 1.2 per 1,000 below the mean rate in the ten preceding third quarters, and 0.7 per 1,000 below the rate in the third quarter of 1914.

Correspondence.

MITRAL STENOSIS INSANITY.

Sir,—In your issue of April 1, under the heading, "Insanity Due to Mitral Stenosis," Dr. Lind gives an interesting account of three cases of insanity in which, *post mortem*, was demonstrated "an extreme condition of mitral stenosis." It is quite clear that Dr. Lind looks upon the mitral stenosis as the cause of the insanity in these three cases. He refers to "mitral stenosis insanity" as an entity "not definitely described" by certain authors, and he claims that his three cases differ from other cases of insanity presenting mitral stenosis, in that in the former "there is practically a single physical condition, namely, mitral stenosis."

I wish to join issue with Dr. Lind on two points, one of logic, and one of fact. In the first place, I claim that Dr. Lind is not justified in grouping these three cases under the grouping, "Insanity Due to Mitral Stenosis." They were cases of insanity accompanied by (amongst other physical conditions, as we shall see) mitral stenosis. But what evidence is there that the heart condition was the cause of the insanity? I venture to say, none. Concomitance and causation are not identical, as a great many medical writers seem to think. And the manner and habit of confusing the two is constantly leading medical writers into making the most misleading statements, statements which, owing to the loose and slipshod method of thinking now in vogue, carry weight far beyond their desert. What Dr. Lind has to establish before he can justly attribute his three cases of insanity to mitral stenosis, is that the former was the necessary consequence of the latter, that the insanity was conditioned by the heart lesion. This he has not done.

Secondly, an analysis of the three cases shows that the heart lesion was by no means "practically a single physical condition." Each of the patients was a woman over 40. One had albuminuria. In two, heredity was a distinct factor. In all there were various lesions of other organs. Again, if we take the mental symptoms in each case, they are found to be such as might be met with in numbers of cases without any mitral stenosis.

Altogether, then, we are, I maintain, justified in concluding that the proper verdict to give in regard to Dr. Lind's case is the Scottish one of "not proven."

Yours, etc.,

E. J. HOWLEY,

Assistant Medical Superintendent.

Hospital for Insane, Goodna, Q.,
Undated.

Obituary.

HUGH BOYD.

Deep regret is felt in Bendigo at the tragic death of Dr. Hugh Boyd. Dr. Boyd was attempting to adjust a defect in the fan in front of the engine of his motor-car on March 5, 1916, when the car started to move downhill, and, before he was aware of his dangerous predicament, he fell under-

neath and was pinned by the back axle. When the progress of the car was arrested by a sapling, our colleague was found wedged in between the ground and the axle, apparently lifeless. An attempt was made to free the large veins in the neck, which were being compressed by a fragment of the sternum. Unfortunately, the injuries received were too severe, and the skill and tender care of the practitioners called in to his assistance did not suffice to prevent a fatal issue.

Hugh Boyd was a native of Scotland, having been born in Beith. He studied medicine at Edinburgh, and took his degree in 1863 at the University. After graduating, he spent a year in Paris, where he continued his medical studies. The year 1865 was passed afloat, and, shortly after, he came to Victoria and settled in Bendigo, where he entered into partnership with his elder brother, the late James Boyd. In 1871 he took over the whole practice. During the 50 years of his professional life in Bendigo, Dr. Boyd built up a reputation as enviable as it was well-deserved. He was the type of what a general practitioner should be. Skilful, courteous, considerate, and benevolent, he compelled the love of his patients and the respect of his neighbours. He brought hope and brightness into every home he visited.

For about 20 years he has held the position of a member of the Bendigo Hospital Committee of Management, and on more than one occasion he occupied the president's chair. He was three times President of the Council of the School of Mines, and for a considerable time acted as Honorary Secretary of the Medical Defence Association. In all these positions, as well as in others, he enjoyed the confidence and trust of his colleagues and the respect of the public. He leaves a widow, two sons and eight daughters. One of his sons is at present in Egypt on active service, and the second is in the Royal Navy. Two of his daughters are at present being trained as nurses in Melbourne.

Medical Appointments Vacant, etc.

*For announcements of medical appointments vacant, assistants, locum tenentes sought, etc., see "Advertiser," page xv.

Texas District Hospital, Queensland, Medical Officer.
Brisbane Hospital, Resident Medical Officer.
Launceston General Hospital, Assistant House Surgeon.
Western Australia, Medical Officer of Health.

Medical Appointments.

IMPORTANT NOTICE.

Medical practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429 Strand, London, W.C.

Branch.	APPOINTMENTS.
QUEENSLAND.	
(Hon. Sec., B.M.A. Building, Adelaide Street, Brisbane.)	Brisbane United F.S. Institute. Croydon Hospital. Laudley Hospital, Medical Officer.
WESTERN AUSTRALIA.	
(Hon. Sec., 230 St. George's Terrace, Perth.)	Swan District Medical Officer. All Contract Practice Appointments in Western Australia.

Branch.	APPOINTMENTS.
SOUTH AUSTRALIA.	
(Hon. Sec., 3 North Terrace, Adelaide.)	The F.S. Medical Assoc., Incorp., Adelaide. Department of Public Instruction—New Appointments as Medical Officer, Ophthalmic Surgeon, Ear, Nose and Throat Surgeon, Physician. Australian Natives' Association. Balmmain United F.S. Dispensary. Canterbury United F.S. Dispensary. Goulburn F.S. Association. Leichhardt and Petersham Dispensary. M.U. Oddfellows' Med. Inst., Elizabeth Street, Sydney. Marrickville United F.S. Dispensary. N.S.W. Ambulance Association and Transport Brigade. North Sydney United F.S. People's Prudential Benefit Society. Phoenix Mutual Provident Society. F.S. Lodges at Casino. F.S. Lodges at Lithgow. F.S. Lodges at Orange. F.S. Lodges at Parramatta, Penrith, Auburn, and Lidcombe. Newcastle Collieries—Killingworth, Seaham Nos. 1 and 2, West Wall-send.
NEW SOUTH WALES.	
(Hon. Sec., 30-34 Elizabeth Street, Sydney.)	
NEW ZEALAND: WELLINGTON DIVISION.	
Hon. Sec., Wellington.)	F.S. Lodges, Wellington, N.Z.

Diary for the Month.

- Apr. 15.—Northern Suburbs Med. Assoc. (N.S.W.).
Apr. 18.—Eastern Suburbs Med. Assoc.
Apr. 18.—N.S.W. Branch, B.M.A., Executive and Finance Committee.
Apr. 19.—W. Aust. Branch, B.M.A., General.
Apr. 19.—Western Suburbs Med. Assoc. (N.S.W.).
Apr. 20.—City Med. Assoc. (N.S.W.).
Apr. 21.—Q. Branch, B.M.A., Council.
Apr. 25.—N.S.W. Branch, B.M.A., Medical Politics Committee, Organization and Science Committee.
Apr. 26.—Vic. Branch, B.M.A., Council.
Apr. 27.—St. Aust. Branch, B.M.A., Branch.
Apr. 27.—Sydney University Medical Society, Annual Meeting.
Apr. 28.—N.S.W. Branch, B.M.A., Ordinary.
May 3.—Cent. South. Med. Assoc. (N.S.W.).
May 3.—Cent. West. Med. Assoc. (N.S.W.).
May 5.—Q. Branch, B.M.A., Branch.
May 9.—N.S.W. Branch, B.M.A., Ethics Committee.
May 9.—Tas. Branch, B.M.A., Council and Branch.
May 11.—Vic. Branch, B.M.A., Council.
May 12.—N.S.W. Branch, B.M.A., Clinical Evening.
May 12.—South Aust. Branch, B.M.A., Council.

EDITORIAL NOTICES.

Manuscripts forwarded to the office of this Journal cannot under any circumstances be returned.
Original articles forwarded for publication are understood to be offered to *The Medical Journal of Australia* alone, unless the contrary be stated.
All communications should be addressed to "The Editor," *The Medical Journal of Australia*, B.M.A. Building, 30-34 Elizabeth Street, Sydney, New South Wales.